ADD Q17

CLAIMS

1. Implant forming an intraocular lens for a lensed or aphacic eye, comprising an optical part and a haptic part, the optical part being made at least partially of flexible material and the haptic part being made at least partially of rigid material, characterized in that the structure of said implant is monobloc.

2. Implant according to claim 1, characterized in that the rigid material of the implant has a shape modified by at least one route selected from chemical reactions and polymerization reactions of the flexible material constituting the other parts of the implant.

3. Implant according to ~~either~~ claim 1 ~~or claim 2,~~ characterized in that the flexible material constituting one part of the implant is hydrophilic.

4. Implant according to ~~any one of claims 1 to 3,~~ claim 1 characterized in that the flexible material constituting the implant is selected from crosslinked polymer and copolymer materials.

5. Implant according to claim 4, characterized in that the copolymer materials are based on random methyl methacrylate-hydroxymethyl methacrylate (MMA-HMA) copolymers crosslinked by the addition of a polyfunctional agent.

6. Implant according to claim 5, characterized in that the polyfunctional agent is diethylene glycol dimethacrylate.

7. Implant according to claim 4, characterized in that the polymer materials are selected from polydimethylsiloxanes.

8. Implant according to ~~any one of claims 1 to 7,~~ claim 1 characterized in that the optical part comprises one or more strips made of flexible material alternating with strips made of rigid material.

9. Implant according to ~~any one of claims 1 to 8,~~ claim 1 characterized in that the optical part comprises a zone

made of rigid material which adjoins the haptic part and is in continuity with the rigid material of the haptic part.

10. Implant according to ~~any one of claims 1 to 8,~~ claim ) characterized in that the optical part is primarily made of flexible material and the haptic part is primarily made of rigid material.

11. Implant according to claim 1 ~~any one of claims 1 to 10,~~ characterized in that the haptic part consists of attachment members.

12. Process ~~for manufacturing an implant according to any one of claims 1 to 11,~~ claim 1 comprising a first step of producing a preform (or blank) which can be shaped into an intraocular lens from a flexible monobloc starting material, a step of shaping said preform into an intraocular lens, characterized in that said process further comprises a step of structurally modifying at least one zone of the preform which it is intended should become rigid.

13. Process according to claim 12, characterized in that the step of structural modification comprises a phase of impregnating the zone (or zones) of the preform which it is intended should become rigid.

14. Process according to claim 12 ~~or 13,~~ characterized in that the step of structurally modifying the starting material comprises at least one reaction of the organic compounds with the starting material, selected from chemical reactions and polymerization reactions.

15. Process according to claim 12 ~~any one of claims 12 to 14~~, characterized in that the machining step precedes the step of structurally modifying the starting material.

16. Process according to claim 15, characterized in that it comprises a step of protecting the zone of the preform which it is intended should remain flexible.

17. Process according to claim 16, characterized in that it comprises a step of removing protection from the

zone of the preform which it is intended should remain flexible.

18. Process according to ~~any one of claims 12 to 14,~~ claim 12 characterized in that the machining step follows the structural modification step.